## **EENS Job Risk Assessment**

The only official copy of this file is the one on-line. Before using a printed copy, verify that it is the most current version by checking the document issue date on the EENS OHSAS web site.

Name(s) of Risk Team Members: K. Lewin, J. Nagy; M. Mahajan; E. Hoey; P. Philipsberg; A. Piper; J. Lloyd; L. Bowerman; R. Selvey; P. Carr; J. Madaia; C.R. Krishna	Point Value → Parameter ↓	1	2	3	4	5
Job Title: Non-ionizing Radiation  JRA #: EENS-JRA-015  Rev. #: 0 Date: 6/27/06	Frequency (B)	<u>≤</u> once/year	⊴once/month		<u>≤</u> once/shift	>once/shift
Job Description: Working with or around Static Magnetic Fields, Non-ionizing Radiation (including radio frequency/microwave), or UV/IR light	Severity (C)	First Aid Only	Medical Treatment	Lost Time	Partial Disability	Death or Permanent Disability
Training Procedures List (Optional): none Applicable Standard Operating Procedures: none  Approved by:  Patrick Sullivan  Date: 8/31/06	Likelihood (D)	Very Unlikely	Unlikely	Possible	Probable	Multiple
Stressors (if applicable, please list all)		Reas	on for Revision	(if applicable):		Comments:

			Before Additional Controls				7000000000	Additional ontrols								
Activity	Hazard	Control(s)	Stressor	# of People	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors	# of People	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Working with or around magnetic fields and magnets	Struck by and pinched by objects: dropped, pulled into field or attracted to other ferromagnetic objects	Work planning, SMF SBMS SA, training, move vulnerable equipment, walk down prior to move, gloves [when applicable].	N	1	1	3	2	6								
	Medical implant malfunction: exposure to >5 gauss	Work planning, IH review, OMC surveillance, SMF SBMS SA, area postings, roped off areas of high field strength, training	N	1	1	5	2	10								
	Exposure to magnetic fields >600 Gauss	Work planning, IH survey, SMF SBMS SA, procedures, training, postings	N	1	2	3	2	12								
	Injury due to avoidance reaction (startle response)	Work planning, SMF SBMS SA, training, posting	N	1	2	2	3	12								

## **EENS Job Risk Assessment**

The only official copy of this file is the one on-line. Before using a printed copy, verify that it is the most current version by checking the document issue date on the EENS OHSAS web site.

		incon-ninc. Detaile using a printed copy, verify	Before Additional Controls				iona		After Additional Controls							
Activity	Hazard	Control(s)	Stressor	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors	# of People Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction	
Work on or near RF/microwave sources (e.g. RF heaters, Lepel furnaces, commercial microwave ovens)	Exposure to RF/microwave radiation	Training, ESR work planning, IH surveys, area posting, barriers, interlock on commercial ovens	N	1	3	2	2	12								
	Electrical shock	Proper installation, grounding, training, work planning, PPE, Tier 1	N	1	3	5	1	15								
	Reflex injury from electrical shock or hot surfaces	Proper installation, grounding, work planning, PPE Tier 1	N	1	2	2	3	12								
	Localized thermal injury from hot objects	Work planning, thermal gloves, safety glasses	N	1	2	2	3	12								
UV/IR exposure from closed instrumentation (e.g. Spectrophotometer, HPLC detectors)	Eye damage from UV or IR light – photokeratitis, cataracts	Closed systems, interlocks (some equipment), low system power, polycarbonate/acrylic safety glasses	N	1	3	4	2	24								

*Risk		21 to 40	41-60	61 to 80	81 or greater
	Negligible	Acceptable	Moderate	Substantial	Intolerable

Rev 0